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GenCore version 5.1.6 Copyright (c) 1993 - 2003 Compugen Ltd.
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OM protein - protein search, using sw model

Run on:

August 28, 2003, 18:27:17; Search time 26.5 Seconds (without alignments) 107.116 Million cell updates/sec

US-09-743-225-4 62 1 KDKATFGTHDG 11 Title:
Perfect score: (Sequence:

BLOSUM62 Gapop 10.0 , Gapext 0.5 Scoring table:

830525 seqs, 258052604 residues Searched: 830525 Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database :

sp_virus:*
sp_vertebrate:*
sp_unclassified:* sp_fung1:*
sp_human:*
sp_invertebrate:* sp_rvirus: * sp_bacteriap: * sp_archeap: * SPTREMBL_23:* 1: sp_archea:* 2: sp_bacteria:* sp_organelle:* _rodent:

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	Description	Q951b0 pan troglod	Q9cy42 mus musculu	Q8ggjl lactobacill	Q19301 caenorhabd1	064923 zea mays (m	Q91p90 arabidopsis	Q8ruu3 oryza sativ	Q91pc5 arabidopsis	Q9hpwl halobacteri	Q9nbe2 chironomus	Q9uqx3 corfolus ve	Q9wxn8 thermotoga	Q9p8h5 humicola in		Q9y119 chironomus	
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	a	095LB0	09CY42	08663	019301	064923	09LP90	QBRU	O9LPC5	Q9HPW1	Q9NBE	09UQX3	O9WXN8	09PBH	9NBE	09Y1L9	09Y11
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æ	Query Match I	90.3	74.2	69.4	67.7	67.7	66.1	64.5	64.5	62.9	61.3	61.3	61.3	61.3	59.7	59.7	59.7
	Score	56	46	43	42	42	41	40	40	39	38	38	38	38	37	37	37
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Ouery Match 90.3%; Score 56; DB 6; Length 345; Best Local Similarity 90.9%; Pred. No. 0.026; Matches 10; Conservative 0; Mismatches 1; Indels

	Oggeta dictyostell Oggeta dictyostell Ognb94 anopheles s Ogduto pelargonium Oghh39 methanobact Og0249 pseudomonas O34392 streptomyce
	09G051 09MB94 09DUT0 09HH39 080214 09I2G9
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## ALIGNMENTS

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Gaps

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Q9CY42 Q9CY42;

RESULT 2

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STRAIN-CCM3626;
Bringel F., Hubert J.-C.;
Bringel F., Hubert J.-C.;
Investigation of arginine requirement in Lactobacillus isolated from different environments revealed point mutations, insertions and deletions in arginine biosynthetic genes.";
Submitted (MAY-2002) to the EMBL/GenBank/DDBJ databases.
EMBL; AF514870; AA015988.1; ...
EMBL; AF514870; AA015988.1; ...
SEQUENCE 256 AA; 28597 MW; B4FE2B25276CEF5C CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Eukaryota; Metazoa; Nematoda; Chromadorea; Rhabditida; Rhabditoidea;
Rhabditidae; Peloderinae; Caenorhabditis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           "Genome sequence of the nematode C. elegans: a platform for investigating biology. The C. elegans Sequencing Consortium."; Science 282:2012-2018(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 42; DB 5; Length 574;
Pred. No. 20;
0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                  Length 256;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Pauley A.;
"The sequence of C. elegans cosmid F10E7.";
Submitted (DEC-1995) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Submitted (AUG-2001) to the EMBL/GenBank/DDBJ databases EMBL; U41264; AAA82423.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Hypothetical protein.
SEQUENCE 574 AA; 62301 MW; AA209D1029FC700E CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-NOV-1996 (TrEMBLrel. 01, Created)
01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
01-NAR-2003 (TrEMBLrel. 23, Last annotation update)
Hypothetical 62.3 kDa protein.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          574 AA.
                                                                                                                                                                                                                                                                                                                                           69.4%; Score 43; DB 3 63.6%; Pred. No. 5.4; tive 1; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            67.7%; Score 42;
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InterPro; IPR002293; AA/rel_permeasel.
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01-AUG-1998 (TrEMBLrel. 07, Created)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STRAIN-Bristol N2;
MEDLINE-99069613; PubMed-9851916;
                                                                                                                                                                                                                                                                                                                    Best Local Similarity 72.7
Matches 8; Conservative
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242 QDKLNFGAHDG 252
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A. STRAIN-Bristol N2;
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RX FRAIN-CSTRAING.

RX FRANCE-TROUGH-Embryonic liver;

RA Arakawa T., Shinagawa A., Shibata K., Yoshino M., Itch M., Ishii Y.,

RA Arakawa T., Hara A., Fikunishi Y., Komno H., Adachi J., Fukuda S.,

RA Alzawa K., Izawa M., Nishi K., Kiyosawa H., Rondo S., Yamanaka I.,

RA Alzawa K., Tawa M., Nishi K., Kiyosawa H., Roaukawa T., Saito R.,

RA Alzawa K., Sasterland T., Bono H., Kasukawa T., Saito R.,

RA Radota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T.,

RA Radota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T.,

RA Ruchi P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,

RA Schriml L.M., Staubli F., Suzuki R., Tomita M., Wagner L., Washio T.,

RA Staff M., Okido T., Furuun M., Aono H., Baldarelli R., Barsh G.,

RA Blake J., Boffelli D., Bojunga N., Carninci P., de Bonaldo M.F.,

Brownstein M.J., Bult C., Fletcher C., Fujita M., Gariboldi M.,

RA Gustincich S., Hill D., Hofmann M., Hume D.A., Kamiya M., Lee N.H.,

RA Lyons P., Marchioni L., Mashima J., Machara Y., Storch K.-F.,

RA Saski H., Toyo-oka K., Wang K.H., Weitz C., Whittaker C., Wilming L.,

RA Hayshiasi X., Yoshida K., Hasegawa Y., Kawaji H., Kohtsuki S.,

RA Hayshiasi X.,

RA Hayshiasi Y.;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mus musculus (Mouse).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodéntia; Sciurognathi; Muridae; Musinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      "Functional annotation of a full-length mouse cDNA collection.";
Nature 409:685-690(2001).
EMBL: AK010926; BAB27271.1; ..
HSSP; P02749; 1C12.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                       01-JUN-2001 (TIEMBLIE]. 17, Last Sequence update)
01-DEC-2001 (TIEMBLIE]. 19, Last annotation update)
13 days embryo liver cDNA, RIKEN full-length enriched library,
clone:2510008B09, full insert sequence.
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Lactobacillus.
NCBL_TaxID=1590;
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Last sequence update)
Last annotation update)
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1; Mismatches
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InterPro; IPR000436; Sushi_SCR_CCP.
Pfam; PF00084; sushi; 4.
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80.08;
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01-MAR-2003 (TrEMBLrel. 23,
01-MAR-2003 (TrEMBLrel. 23,
01-MAR-2003 (TrEMBLrel. 23,
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Matches 8; Conservative
                                227 KDKATFGCHDG 237
                                                                                                                                                                                                                   PRELIMINARY;
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1 KDKATFGTHDG 11
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SEQUENCE Query Match

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RESULT 3 086631

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         AC020646;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Pfam; PF00665
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QBRUU3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Arabidopsis thaliana (Mouse-ear cress).

Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;

Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; Rosidae;

eurosids II; Brassicales; Brassicaceae; Arabidopsis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
Shinn P., Brooks S., Buehler E., Chao Q., Johnson-Hopson C., Khan S.,
Kim C., Altafi H., Bel Q., Chin C., Chlou J., Chol E., Conn L.,
Conway A., Gonzales A., Hansen N., Howing B., Koo T., Lam B., Lee J.,
Lenz C., Li J., Liu A., Liu S., Mukharsky N., Nauyen M.,
Palm C., Pham P., Sakano H., Schwartz J., Southwick A., Thaveri A.,
Toriumi M., Vaysberg M., Yu G., Federspiel N.A., Theologis A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Genomic sequence for Arabidopsis thaliana BAC T32E20 from chromosome
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                                                                                                                                                                                                                               SEQUENCE FROM N.A.
MEDLINE-98169346; PubMed-9501113;
Gao M., Wanat J., Stinard P.S., James M.G., Myers A.M.;
"Characterization of dulli, a maize gene coding for a novel starch
                                                                                                                   Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
PACCAD clade; Panicoideae; Andropogoneae; Zea.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 10; Length 1674;
65;
                                                                                                                                                                                                                                                                                                           "Cnate...",
gythase.",
Plant Cell 10:399-412(1998).
EMBL; AF023159; AAC14014.1; -.
EMBL; AF023159; AAC14014.1; -.
InterPro: IPR001296; Glycoc_trans_1.
Pfan; PF00534; Glycos_transf_1; 1.
Pfan; PF00534; Glycos_transf_1; 1.
***Configure 1674 AA; 188311 MW; FA31BE959A01771D CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Submitted (FEB-2000) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ecker J.R.; Submitted (JAN-2000) to the EMBL/GenBank/DDBJ databases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Submitted (JAN-2000) to the EMBL/GenBank/DDBJ databases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-OCT-2000 (TrEMBLrel. 15, Created)
01-OCT-2000 (TrEMBLrel. 15, Last sequence update)
01-OCT-2002 (TrEMBLrel. 22, Last annotation update)
T32E20.30.
01-AUG-1998 (TrEMBLrel. 07, Last sequence update)
01-MAR-2003 (TrEMBLrel. 23, Last annotation update)
Starch synthase DULL1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 42; DB 1
Pred. No. 65;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    67.78;
72.78;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity 72.7
les 8; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          611 KQLATVGTHDG 621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 KDKATFGTHDG 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
                                                                                                  Lea mays (Maize).
                                                                                                                                                                                       NCBI_TaxID=4577;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ecker J.R.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
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Matches
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Q9LP90
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SEQUENCE FROM N.A.
STRAIN-CY. Nipponbare;
STRAIN-CY. Nipponbare;
STRAIN-CY. Nipponbare;
STRAIN-CY. Nipponbare;
STRAIN-CY. Hallo J., Ouyang S., Liu J., Moffat K.S., Hill J.N.,
Gansberger K., Brenner M., Burgess S., Hance M., Shvartsbeyn M.,
Tsitrin T., Riggs F., Hsiao J., Zismann V., Blunt S., Pai G.,
Vanaken S.E., Utterback T.R., Feldblyum T.V., Kalb E., Quackenbush J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Putative gag-pol polyprotein.
OJ1004_F02.14 OR OSNBA0014J14.7.
OJ12a Sativa (japonica cultivar-group).
Eukaryota; Viridiplantes; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnollophyta; Liliopsida; Poales; Poaceae;
Ehrhartoideae; Oryzeae; Oryza.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 1338;
                                                                                                                                                                                                                                                                                                                                                             Score 41; DB 10; Length 1397;
Pred. No. 82;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Wing R.A., Yu Y., Soderlund C., Chen M., Kim H.-R., Rambo Saski C., Henry D., Oates R., Simmons J.;
"Rice Genomic Sequence.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SMARY, SM00298; CHROMO; 1.
Polyprotein; RNA-directed DNA polymerase; Transferase.
SEQUENCE 1338 AA; 150643 MW; 7D68E2A564279648 CRC64;
                                                                                                                                                                                          Pfam; PF00078; rvt; 1.
SMART; SM00298; CHROMO; 1.
PROSITE; PS50013; CHROMO_2; 1.
RNA-directed DNA polymerase; Transferase.
SEQUENCE 1397 AA; 159426 MW; 1ED5717280BF298E CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
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EMBL, AC092387; AAL82656.1; -.
EMBL, AC092172; AAM18147.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-JUN-2002 (TrEMBLrel. 21, Created)
01-JUN-2002 (TrEMBLrel. 21, Last sequence update)
01-MAR-2003 (TrEMBLrel. 23, Last annotation update)
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Pred. No. 1.2e+02;
0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRT; 1338 AA
                                                                                                                                                                                                                                                                                                                                                                                                                       1; Mismatches
InterPro; IPR000953; Chromo.
InterPro; IPR005162; Retrotrans_gag.
InterPro; IPR001584; Rve.
InterPro; IPR000477; RVTse.
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InterPro; IPR005162; Retrotrans_gag
                                                                                                     Pfam; PF00385; chromo; 1.
Pfam; PF03732; Retrotrans_gag; 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pfam; PF03732; Retrotrans_gag;
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                                                                                                                                                                                                                                                                                                                                                                66.1%;
70.0%;
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InterPro; IPR000477; RVTse.
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                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity 70.0
Matches 7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2 DKATFGTHDG 11
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                                                                                                                                                                Pfam; PF00665; rve; 1
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Fri Aug 29 11:57:47 2003

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InterPro; IPR006179; 5_nucleotidase.
InterPro; IRR004843; M*ppestrase.
Pam; PF02872; 5_nucleotidaseC; 1.
Pfam; PF00149; Metallophos; 1.
       EMBL; AE005061; AAG19756.1;
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SEQUENCE
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Q9NBE2;
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Q9NBE2
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Q9UQX3
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                                                                                                                                                                                                                                                         Arabidopsis thaliana (Mouse-ear cress).

Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnollophyta; eudicotyledons; core eudicots; Rosidae;
eurosids II; Brassicales; Brassicaceae; Arabidopsis.

NCBI_TaxID=3702;
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                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.

STRAIN—cv. Columbia;
Liu S.X., Sakano H., Yu G., Lee J.M., Lenz C., Pham P., Toriumi M.,
Liu S.X., Chiou J., Choi E., Chung M., Gonzalez A., Howng B., Liu A.,
Vaysberg M., Alfalfi H., Brooks S., Buehler E., Chao Q., Conn L.,
Conway A.B., Hansen N.F., Johnson-Hopson C., Khan S., Kim C., Lam B.,
Miranda M., Nguen M., Palm C.J., Shinn P., Southwick A., Davis R.W.,
Ecker J.R., Federspiel N.A., Theologis A.,
"The sequence of BAC F22M8 from Arabidopsis thaliana chromosome 1.";
Submitted (JAN 2001) to the EMBL/GenBank/DDBJ databases.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PROSTITE; PS00122; Sec7; 1.
PROSTITE; PS0012; PACSPHOPANTETHEINE; 1.
PROSTITE; PS50190; SEC7; 1.
PROSTITE; PS50190; SEC7; 1.
1750 AA; 194941 MW; F4FCFF663ACDB019 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Halobacterium sp. (strain NRC-1).
Archaea; Euryarchaeota; Halobacteria; Halobacteriales;
Halobacteriaceae; Halobacterium.
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01-WAR-2001 (TrEMBLrel. 16, Last sequence update)
01-WAR-2003 (TrEMBLrel. 23, Last annotation update)
27.33'-cycllc-nucleotide 2'-phosphodiesterase.
YFKN OR VNG1450G.
                                                                                                                                                                                      Last sequence update)
Last annotation update)
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                                                                                                                     1750 AA.
                                                                                                                                                                    Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EMBL; AC020622; AAF76474.1;
HSSP; Q99418; 1PBV;
InterPro; IPR0060162; Ppantne_attach.
InterPro; IPR000904; Sec7.
Pfam; PF01369; Sec7; 1.
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                                                                                                                                                             01-OCT-2000 (TrEMBLrel. 15, 01-OCT-2000 (TrEMBLrel. 15, 01-MAR-2003 (TrEMBLrel. 23,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity 77.8
hes 7; Conservative
                                                                                                                     PRELIMINARY;
  513 DKTAFRTHDG 522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 || || 111
264 KGTFGGHDG 272
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3 KATFGTHDG 11
                                                                                                                                                                                                                                     F22M8.9 protein.
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                                                                                                                     09LPC5
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                                                                   RESULT 8
Q9LPC5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
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Gaps
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Aphyllophorales; Coriolus.
NCBI_TaxID=57466;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Insect globin gene polymorphisms: intronic minisatellites and a retroposon interrupting exon 1 of homologous globin genes in Chironomus (Diptera).

Gene 251:153-163(2000).
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Gruhl M.C., Scherblk S.V., Almanova K.G., Blinov A., Diez J.-L.,
Bergtrom G.;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Neoptera; Endopterygota; Diptera; Nematocera; Chironomoidea;
Chironomidae; Chironominae; Chironomus.
                                                                                    Length 391;
                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 38; DB 5; Length 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                            03315396A54CE9F5 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        55BA200610C6F466 CRC64;
                                                                                                                                                                                                                                                                                                                                                                         Last sequence update)
Last annotation update)
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Last annotation update)
                                                                                Score 39; DB 17;
Pred. No. 48;
0; Mismatches 2;
                                                                                                                                                                                                                                                                                                            25 AA.
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1; Mismatches
                                                                              Score 39;
Pred. No. 4
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                                                                                                                                                                                                                                                                                                                                                    Created)
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STRAIN-IF030340; TISSUE-Mycelium;
PRINTS; PRO1607; APYRASEFAMLY.
Complete proteome.
SEQUENCE 391 AA; 41347 MW;
                                                                                62.9%;
77.8%;
                                                                                                                                                                                                                                                                                                                                                01-0CT-2000 (TrEMBLrel. 15, 01-0CT-2000 (TrEMBLrel. 15, 01-DEC-2001 (TrEMBLrel. 19, Hemoglobin IIB (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              01-MAY-2000 (TrEMBLrel. 13, 01-MAY-2000 (TrEMBLrel. 13, 01-0CT-2002 (TrEMBLrel. 22, Heat shock protein 30. CVHSP30/2 OR FDD123B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EMBL; AF250302; AAF87711.1;
HSSP; P02229; 1ECA.
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63.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        25 AA; 2625 MW;
                                                                            Query Match 62.9
Best Local Similarity 77.8
Matches 7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best_Local Similarity 63.6
Matches 7; Conservative
                                                                                                                                                                                                                                                                                                            PRELIMINARY;
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10 KDTASFATHAG 20
                                                                                                                                                                2 DKATFGTHD 10
                                                                                                                                                                                                        10 DVATFGNHD 18
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                                                                                                                                                                                                                                                                                                                                                                                                                                                       Chironomus agilis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NCBI_TaxID-113487;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
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61.3%;

Query Match
Best Local Similarity 70.0
Matches 7; Conservative

243 DYATEGIHSG 252

2 DKATFGTHDG 11

à g PRELIMINARY;

09WXNB; O9WXNB

RESULT 12 Q9WXN8

hermotoga maritima.

SEQUENCE FROM N.A NCBI_TaxID=2336;

PRINTS; PR00251; BACTRLOPSIN

Heat shock.

SEQUENCE

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Golightly E.J., Duke K.R., Lassen S.F., Brown K.M., Brown S.H.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     "Humicola insolens cellobiose dehydrogenase: cloning, redox chemistry, and 'logic gate'-like dual functionality."; Submitted (APR-2000) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Golightly E., Brown K.;
Nucleic acids encoding polypeptides having cellobiose dehydrogenase
activity.";
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MEDLINE-20336639; Pubmed-10876092;
Gruhl M.C., Scherbik S.V., Almanova K.G., Blinov A., Diez J.-L.,
Bergirom G.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     "Insect globin gene polymorphisms: intronic minisatellites and retroposon interrupting exon 1 of homologous globin genes in Chironomus (Diptera).";
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Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota; Neopitera; Eudopterygota; Diptera; Nematocera; Chironomidea; Chironomidea;
                                                                                                                                                                                                                                      Eukaryota; Fungi; Ascomycota; mitosporic Ascomycota; Humicola.
NCBL_TaxID=34413;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 785;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2: Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Submitted (APR-2000) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 HSSP; Q01738; 1D7C.
InterPro; IPR000172; GMC_oxred.
InterPro; IPR000205; NAD_binding.
Pfam; PF00713; GMC_oxred; 1.
PROSITE; PS00623; GMC_oxred: 1.
SEQUENCE 785 AA; 84856 MW; 223F5B89A122FBAF CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             55BA20167C76F466 CRC64;
01-OCT-2000 (TrEMBLrel. 15, Created)
01-OCT-2000 (TrEMBLrel. 15, Last sequence update)
01-MAR-2003 (TrEMBLrel. 23, Last annotation update)
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Last annotation update)
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Pred. No. 1.6e+02;
0; Mismatches 2;
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Pred. No. 5.7;
0; Mismatches
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EMBL, AF250304; AAF87713.1; -.
HSSP; P02229; IECA.
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Best Local Similarity 77.8%;
Matches 7; Conservative
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Best Local Similarity 63.6%;
Matches 7; Conservative
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                                                                                                                                                       Cellobiose dehydrogenase.
Humicola insolens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRELIMINARY;
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188 DTATFGFHD 196
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                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM
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Shulein M.;
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SEQUENCE
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          DDT REAL REAL DESTRUCTION OF STANDARD OF S
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                                                                                                                                  SEQUENCE FOUR NO. 1. SEGUENCE STRAIN—IFOSO 340 TISSUE—Mycellum;
MEDLINE-97398356; PubMed-9256254;
Ilmura Y., Tatsumi K.;
Isolation of mRNAs induced by a hazardous chemical in white-rot fungus, Coriolus versicolor, by differential display.";
FEBS Lett. 412:370-374(1997).
FEMBL; AB018407; BAA76589.1; -.
HSSP; P02945; IBRX.
InterPro; IPR001425; Bac_rhodopsin.
Pfam; PF01036; Bac_rhodopsin; 1.
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01-NOV-1999 (TIEMBLE). 12, Last sequence update)
01-UNO-2001 (TIEMBLE). 17, Last annotation update)
01-JUN-2001 (TIEMBLE). 17, Lest annotation update)
011gopeptide ABC transporter, periplasmic oligopeptide-binding
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Pred. No. 1.2e+02;
0; Mismatches 2; Indels
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Pred. No. 53; 3
0; Mismatches 3; Indels
          Submitted (OCT-1998) to the EMBL/GenBank/DDBJ databases.
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Interpro; IPR000914; SBP_bac_5.
Pfam; PF00496; SBP_bac_5; 4.
Complete proteome.
SEQUENCE 606 AA; 69941 MW; 1

61.3%; 77.8%;

Best Local Similarity 77.8 Matches 7; Conservative

Query Match

350 KKTFGTEDG 358

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3 KATFGTHDG 11

PRELIMINARY;

09P8H5 09P8H5;

RESULT 13 Q9P8H5

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                                                                                                                                                                                                                                                                                                                                                      Chironomus tentans (Midge).

Bukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota; Neoptera; Endopterygota; Diptera; Nematocera; Chironomidea; Chironomidae; Chiro
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Pred. No. 25;
0; Mismatches 4; Indels
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                                                                                              Created)
Last sequence update)
Last annotation update)
     98 AA.
     PRT;
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01-NOV-1999 (TrEMBLrel. 12,
01-NOV-1999 (TrEMBLrel. 12,
01-OCT-2002 (TrEMBLrel. 22,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 63.6%;
Matches 7; Conservative
                                                                                                                                                                                                                                                       Hemoglobin IIB (Fragment).
PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EQUENCE FROM N.A.
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SEQUENCE
Q9Y1L9
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Search completed: August 28, 2003, 18:37:54 Job time: 28.5 secs

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